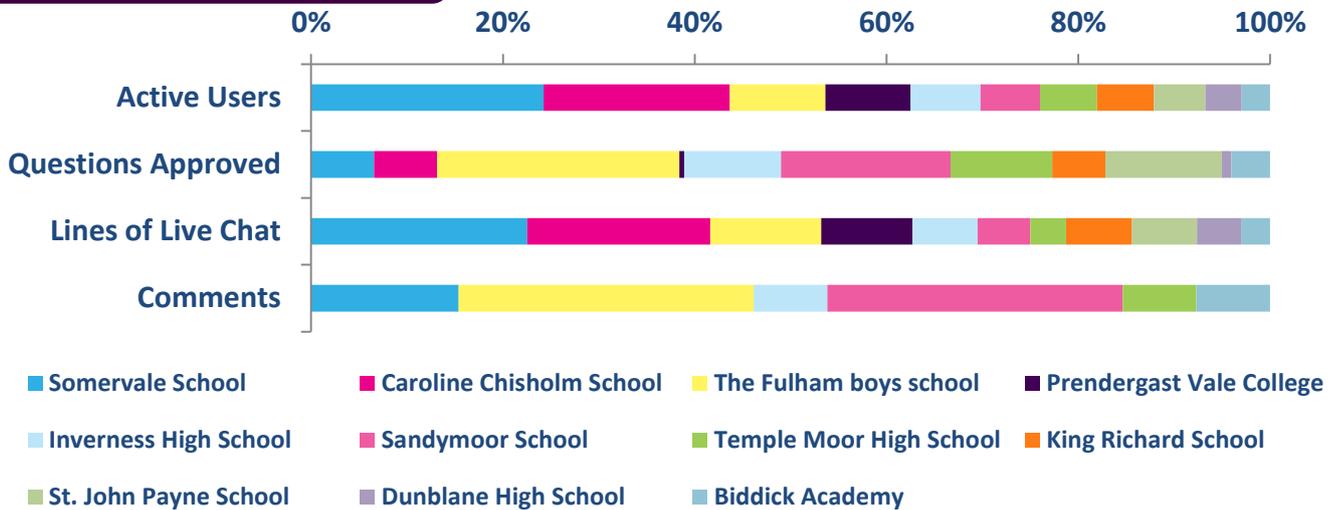




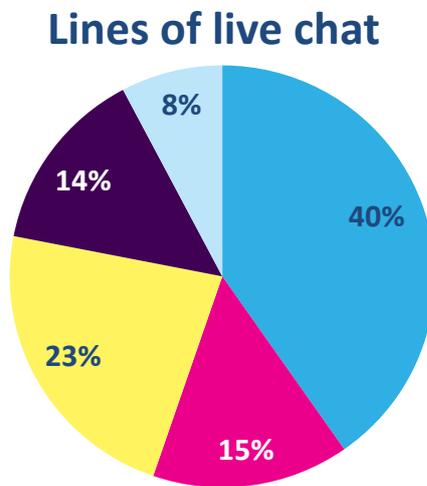
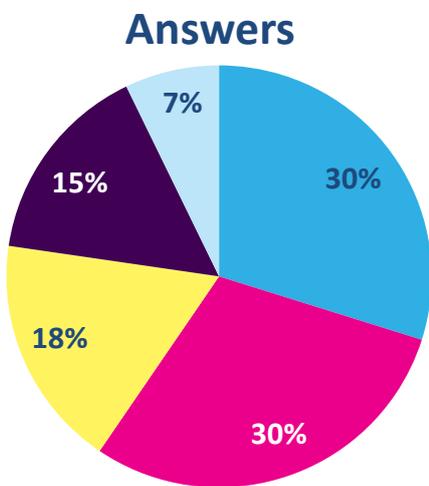
March 2015

The Dysprosium Zone was a general science zone featuring five scientists from varied backgrounds who answered questions on a wide range of topics covering biology, chemistry and physics. Dysprosium Zone had the most active proportion of students out of the March zones with 94% of the registered students chatting, sending in questions and voting. The live chats were especially busy, containing an above average level of typed lines. The winner, James Pope attended every available CHAT during the event.

School data at a glance



Scientists activity



Scientist	Profile views	Position
James Pope	1,649	Winner
Joe Spencer	1,734	2nd
Olivia Lynes	1,052	3rd
Leonie Oostwoud Wijdenes	1,144	4th
Anna Ashton	850	5th

Key figures from the Dysprosium Zone, and the average of the March zones

PAGE VIEWS	DYSPROSIUM ZONE	MARCH '15 ZONES AVERAGE
Total zone	40,174	36,564
ASK page	2,266	2,481
CHAT page	5,332	4,878
VOTE page	2,992	2,422

	DYSPROSIUM ZONE	MARCH '15 ZONES AVERAGE	IAS AVERAGE
Students	400	383	338
% of students active in ASK, CHAT or VOTE	94%	87%	83%
Questions asked	333	496	713
Questions approved	197	238	297
Answers given	432	495	540
Comments	39	45	86
Votes	339	299	270
Lines of live chat	7,528	5,467	4,437
Live chats	20	17	13
Average lines of live chat	376	331	335
Schools	11	10	8

Popular topics

There was a wide range of questions covering biology, chemistry and physics. Many of the questions were related in some way to the work of the scientists. For instance there were a lot of questions about lasers to Joe and questions about vitamin A and sleep to Anna. The students frequently asked about pay and how much money the scientists made; this was a common feature of all the zones

There were also a large number of questions about space which was very evident on the final Friday which coincided with the solar eclipse. Students submitted some straightforward questions such as “What is a quasar?” as well as some very thought provoking and original questions such as “How much does Mars weigh?”. In some instances these questions were quite challenging for the scientists e.g. “Since space is always expanding, what is it expanding into?” which was answered by Olivia who works on nuclear waste.



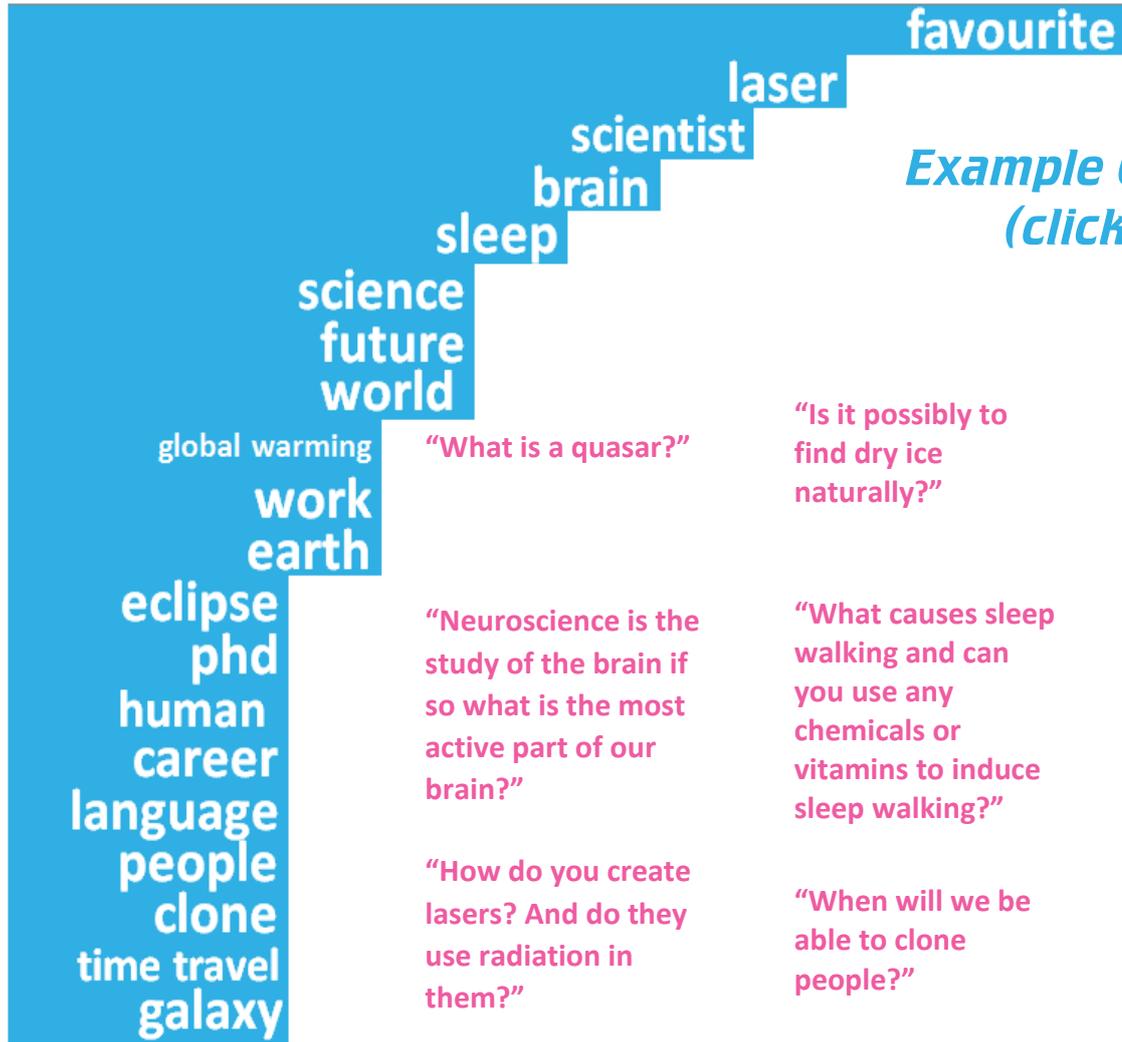
Keywords from live chats in the zone, size of the word represents its popularity





Keywords of questions asked in the zone, length of bar represents frequency of use

0 2 4 6 8 10 12



Example Questions (click for links)

- “What is a quasar?”
- “Will we evolve further?”
- “Is it possibly to find dry ice naturally?”
- “Neuroscience is the study of the brain if so what is the most active part of our brain?”
- “What causes sleep walking and can you use any chemicals or vitamins to induce sleep walking?”
- “Would it be possible for all the ice in Antarctica to melt?”
- “How do you create lasers? And do they use radiation in them?”
- “When will we be able to clone people?”
- “Is there a scientific explanation for spontaneous combustion?”
- “Why is yawning infectious? E.g. when you yawn other people around you will yawn after you?”
- “Do dogs have their own language?”
- “Since space is always expanding, what is it expanding into?”
- “Do you think it is possible to create a Godzilla?”
- “What is Quantum Chemistry?”
- “In different seas do the different molecules change because of the different temperatures?”
- “Why do boys get hair legs?”

Examples of good engagement

The students engaged very well with all the scientists, particularly Anna and James. As was the case with the ASK questions live chats often featured students asking about aliens, lasers, space, computers, evolution and scientists pay. Many students seemed quite interested in Joe's use of lasers in his research, Anna's work on sleep and James' knowledge of the Antarctic.

"How do lasers help cure cancer?" – **Student**

"If you inject people with gold nanoparticles, then you can use a laser to burn away the gold, and the gold only attaches to cancer cells so that's how you cure it" – **Joe, scientist**

"Wow!!!!!!!" – **Student**

"Would it be possible to put a human in hibernation or never sleep using vitamin A?" – **Student**

"I don't think so! We think vitamin A only helps you to sleep, it can't control sleep by itself. We think that it increases the amount of the hormone that makes you sleepy, called melatonin, but maybe if you ate loads of vitamin A it could have a large effect, I don't think anyone's tried! but a lot of vitamin A can also be bad for you so I wouldn't recommend it!" – **Anna, scientist**

"I have heard that the climate change has only changed by 0.6 degrees on average so how will it affect earth" – **Student**

"We have experienced 0.85 degrees warming in the last 120 years, but we are on course to see another 2 degrees or more in the next 90, that is the risk of climate change, that sudden speed of change, quicker than Earth has ever seen" – **James, scientist**

"I really like animals so I am with you on this idea" – **Student**

Scientist winner: James Pope

James' plans for the prize money: *"I want to create an artificial ice core to show school kids how we use them to understand Antarctica; it has yet to be invented! I recently went up to Manchester to take part in an outreach event at a museum on climate change. We had the clothing that scientists on Antarctica need to stay alive in the extreme cold, but we had no way to show some of their vital work, studying ice cores."*



Read James' [thank you message](#).

Student winner: KaiF

For great engagement during the event, this student will receive a gift voucher and a certificate.

Feedback

We're still collecting feedback from teachers, students and scientists but here are a few of the comments made during the event...

"SO AWESOME" – **Maniac42, student**

"I had a great time reading the answers to your questions, science FTW" – **Stem123, student**

"I have often been given the reminder that there is still lots I do not know, yet equally I have been surprised by how much knowledge I do retain!" – **James, scientist**